UNIT - 1

Two marks Questions

Bloom’s K Level - Remember– K1

1. Define software errors.
2. Define software faults.
3. Define software failures.
4. List out the various causes of software errors.
5. Define Software Quality.
6. Define software Engineering.
7. Define quality control.
8. Show the relationship between failure, fault and error.
10. Define portability.
11. Define reusability.
12. Define maintainability.
15. Define efficiency.
16. Define integrity.
17. Define software testing.
18. What are the three categories belonging to McCall’s factor model?
19. Relate Quality assurance with Quality control. Justify your answer that QA is not QC.
21. What are the three categories belonging to Product Transition Software Quality Factors?
22. Outline the different components of SQA Architecture.
23. Find the two contract review stages.
24. Label all the components in SQA architecture.
25. Show the process of object oriented model in flow chart format.
26. What are the main issues in the project development plan?
27. What are the main issues in the project’s quality plan?
28. Which are main components of project life cycle components?
29. Who performs a contract review?
30. List out the different types of BBT.
31. List out the main components of software maintenance.
32. Define Software quality cost
33. Tell the way to conduct contract review process?

Two marks Questions
Bloom’s K Level - Understand- K2

1. Compare software errors, software faults and software failures.
2. Compare QC and QA.
3. Outline the Product view of software quality.
4. Demonstrate the Manufacturing view of software quality.
5. Outline the user view of software quality.
6. Outline the value based view of user quality.
7. Summarize the Transcendental view of manufacturing quality.
8. Compare quality control and quality assurance
9. Relate SQA activities in Software development (process-oriented)
10. Relate SQA activities in software maintenance (product oriented):
11. Summarize product operation factors
12. Summarize about product revision factors.
13. Summarize about product transition factors.
14. Classify SQA system.
15. Compare testing and debugging.
16. Compare black box and white box testing.

Descriptive Questions
Bloom’s K Level - Understand- K2

1. Explain the three categories belonging to McCall’s factor model with examples.
2. Classify the Mccall’s factor model and extend its components.
3. Classify SQA system components and explain at least two major components in detail.
4. Explain in detail about five views of software quality and objectives of SQA.
5. Explain in detail about pre project quality components.
7. Extend the SQA system.
8. Outline the major components of SQA and explain in detail.
9. Demonstrate SQA activities in software development and software maintenance.
10. Illustrate McCall’s factor model with an example.
11. Extend the objectives of quality factors based on quality category.
12. Show the architecture of SQA and explain its components.
13. Demonstrate development and quality plan of SQA system.
14. Extend the pre project quality component of SQA system.

**UNIT – 2**

**Two marks Questions**

**Bloom’s K Level - Remember – K1**

1. List out the advantages and disadvantages of water fall model.
2. Outline the factors affecting the quality assurance activities.
3. Why review team should not consist of many members? Justify your answer.
4. List out the advantages and disadvantages of spiral model.
5. List out the activities needed for SQA
6. Define testing.
7. Define Test case and Test suite.
8. What is cyclomatic complexity in software testing?
10. Why cyclomatic complexity is important?
11. What is equivalence partitioning in software testing?
12. What is boundary testing?
13. Show in diagrammatic way, the process of prototyping model.
14. Show in diagrammatic way, the process of spiral model.
15. Show in diagrammatic way, the process of object oriented model.
16. What is review?
17. What is Formal technical review?
18. When can we use the Waterfall Model?
19. Who all are member of peer review team?
20. What are the characteristics of review leader?
21. Who all are specialized professionals in peer review?
22. Who all are specialized professionals in walkthrough?
23. What are the main tasks of review leader in the preparation stage?
24. What do you meant by correctness?
25. What is a CASE tool?
26. Define classic and real CASE tools.
27. List the main contributions of real CASE tools to product quality.
28. What is repository?
Two marks Questions

Bloom’s K Level - Understand - K2

1. Compare verification and validation.
2. Show the major difference between FDR and PDR.
3. Classify the software development process.
4. Summarize SDLC.
5. Summarize the quality assurance activities needed for a project.
6. Relate the factors that are affecting the intensity of quality assurance activities.
7. Compare inspection and walkthrough.
8. Show the process of object oriented model in flow chart format.
9. Compare inspection and walkthrough.
10. Show the process of waterfall model in flowchart format.
11. Compare BBT and WBT.
12. Extend BBT.
13. Extend WBT.
14. Compare testing and debugging.
15. Compare bottom –up and top-down approach in testing.
16. Compare big bang and incremental testing.
17. Summarize about line and path coverage in WBT.
18. Compare classic and real CASE tools.
19. Summarize the contribution of CASE tools to software product quality.
20. Summarize the contribution of CASE tools to software maintenance quality.
21. Find the number of independent path.

22. Compare stress and load test.
23. Contrast between WBT and BBT
24. Why developer is not allowed for testing their own code?
25. Compare unit, integration and system test.

**Descriptive Questions**

**Bloom’s K Level - Understand- K2**

1. Classify the model of software methodologies and explain in detail each model.
2. Explain the direct and indirect objectives of the review and also explain in detail about FDR.
3. Explain the any two methods of Black Box technique with an example.
4. Summarize about white box testing and explain McCabe’s cyclomatic complexity with an example.
5. Explain the contribution of CASE tools to SQA.
6. Explain the expected benefits of using CASE tools for software system developers and software maintenance teams.
7. Infer the cyclomatic complexity value from the following figure? Why it is needed?

8. Explain in detail about boundary value analysis with an example?
9. Explain in detail about Equivalence value analysis with an example?
10. Compare positive and negative testing with an example.
11. Summarize about documentation testing.
12. Show the test cases for the lock and key and assume that the lock requires two keys to be inserted in a particular order to unlock the locker.
13. Outline all the test cases for ATM that it is subjected to domain testing.
UNIT – 3

Two marks Questions
Bloom’s K Level - Remember – K1

1. What is procedure?
2. What is work instruction?
3. What is procedure and work instruction and why it is needed?
4. What is a SQA procedure manual?
5. What is Template?
6. What is Checklist?
7. List the activities involved in maintaining an organization’s procedures manual.
8. What is needed to prepare training and updating program.
9. List the objective of training and certification.
10. Who all are needed training?
11. Label all the components in training and certification process.
12. List the main components of a certification program.
14. List the components of the documentation control procedure
15. What is controlled document?
16. Show the process of CAPA.
17. What is quality record?
18. List out the components of pre project documents.
19. List out the components SQA infrastructure components
20. List out the components Project life cycle documents.
21. List out the components of SQA system audit documents.
22. Why electronic storage system is better than paper based storage system.

Two marks questions
Bloom’s K Level - Understand- K2

1. Compare Procedures and work instructions.
2. Demonstrate the Five W’s issues resolved by procedures.
3. Outline the use of template for development team.
4. Outline the use of template for software maintenance team.
5. Outline the benefits of checklist.
6. Explain the main objectives of training and certification.
7. Explain the responsibility of certification committee.
8. Compare defect correction and corrective & preventive actions.
9. List the main types of internal sources for CAPA process.
10. Explain the tasks of software configuration management.
11. List the main tasks of software change control.
12. Compare baseline and intermediate software configuration versions.
13. Summarize the responsibility of an authority of controlled documentation.
14. Outline the main objectives for managing controlled documents.
15. Summarize about SCM audit.
16. Outline the issues related to storage of documents

**Descriptive Questions**

**Bloom’s K Level - Understand- K2**

1. Relate the contribution of procedures to software quality assurance.
2. Explain the main contribution of templates to software quality assurance.
3. Illustrate the sequence of activities in SDLC and explain in detail.
4. Demonstrate Pressman's 13 golden guidelines for successful FDR.
5. Compare FDR, inspection and walkthrough.
6. Outline the main contributions of checklists to software quality assurance.
7. Relate the Staff training, Certification Corrective & preventive action to SQA activities.
8. Explain the main approaches of CAPA.
9. Explain the main CAPA follow–up tasks.
10. Summarize in detail about SCM.
12. Explain about documentation control and summarize the issues related to storage and retrieval.